

FIG. 1

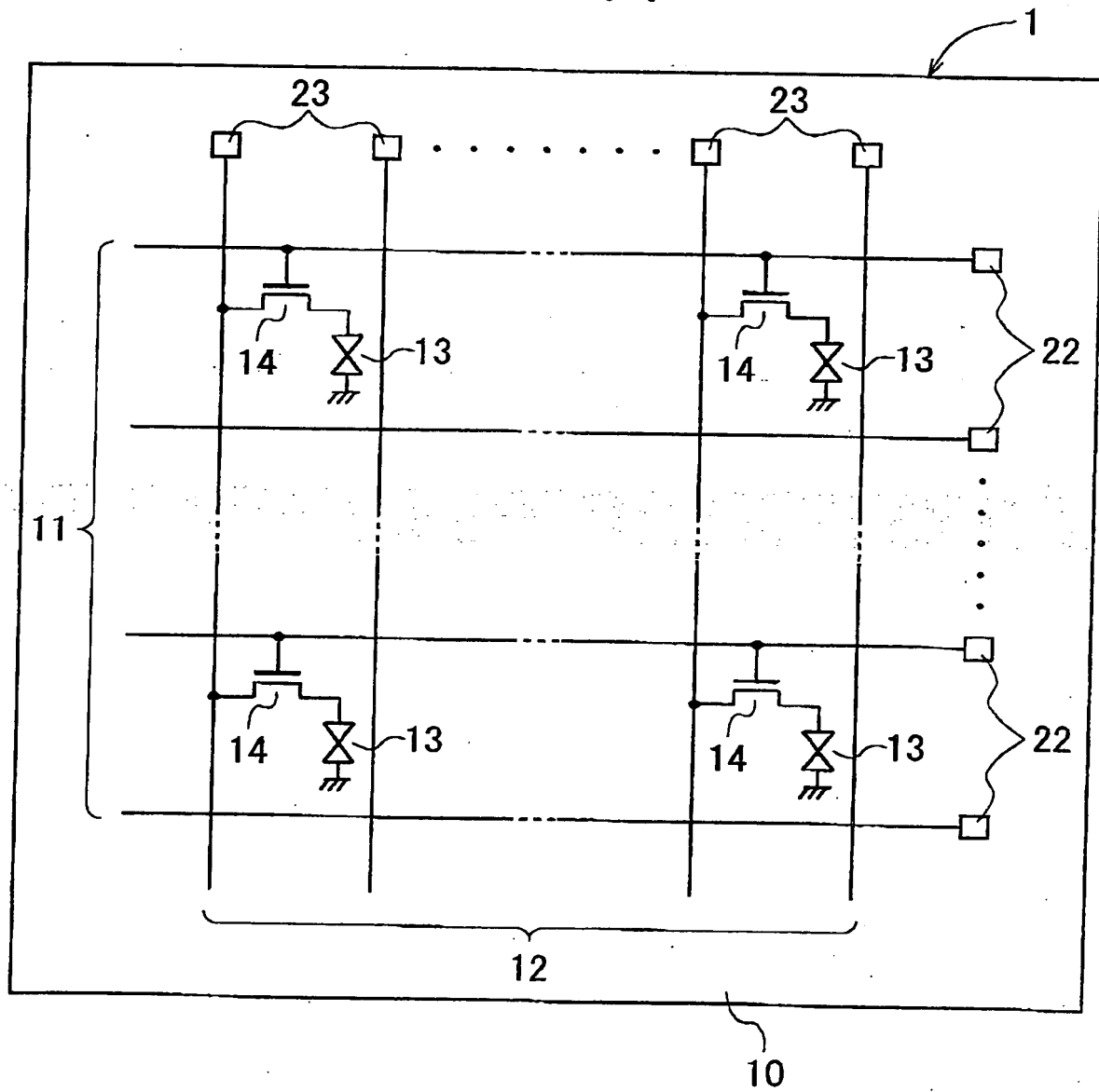


FIG. 2A

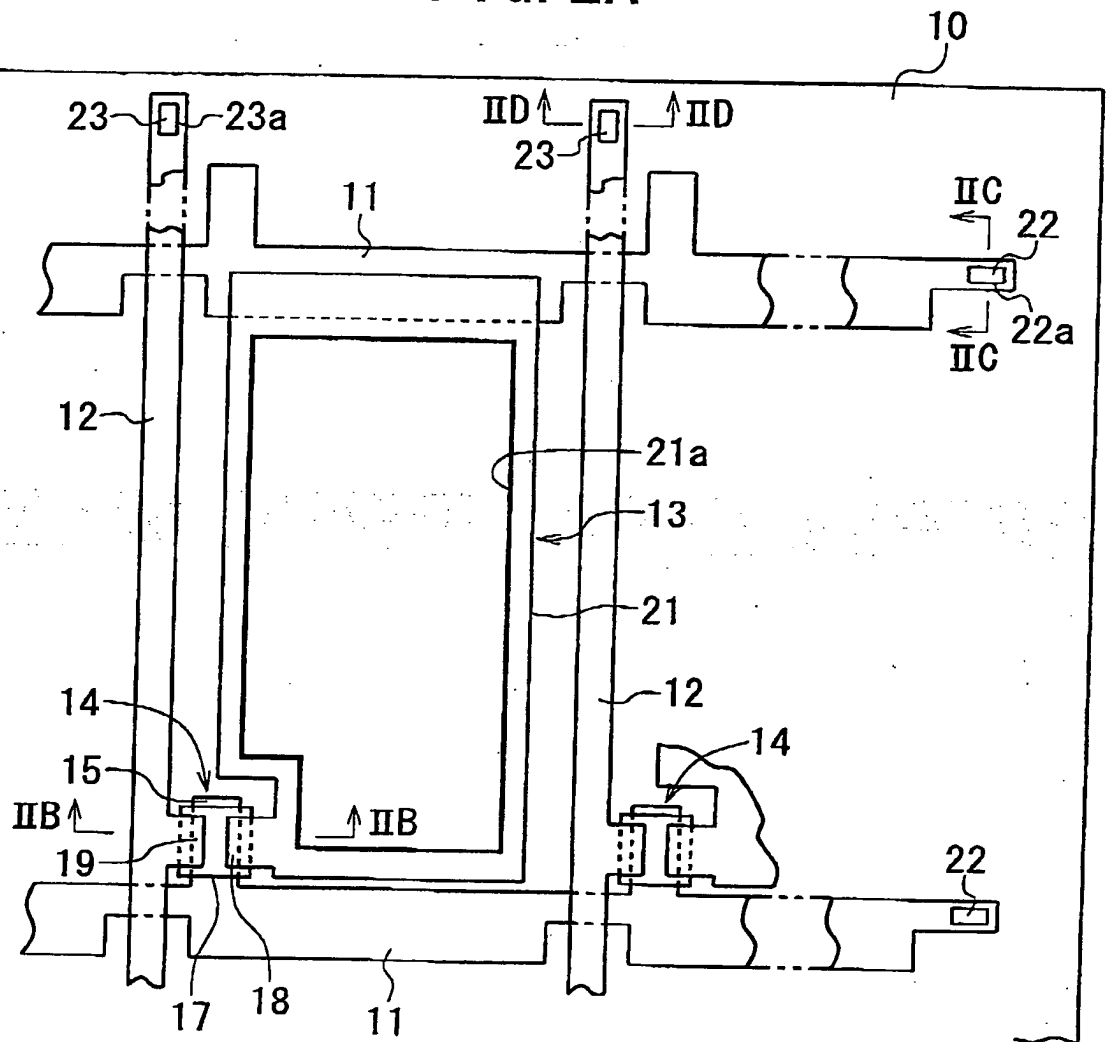


FIG. 2B

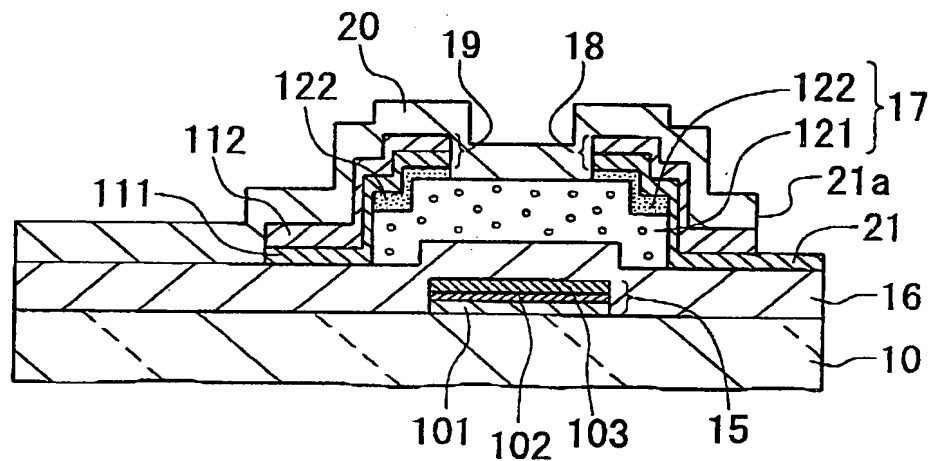


FIG. 2C

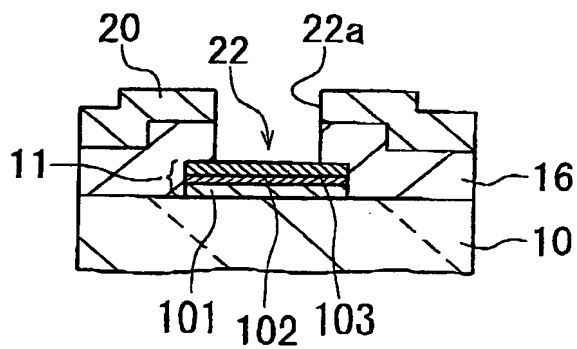


FIG. 2D

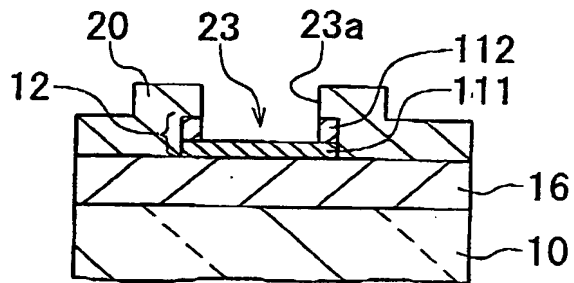


FIG. 3A

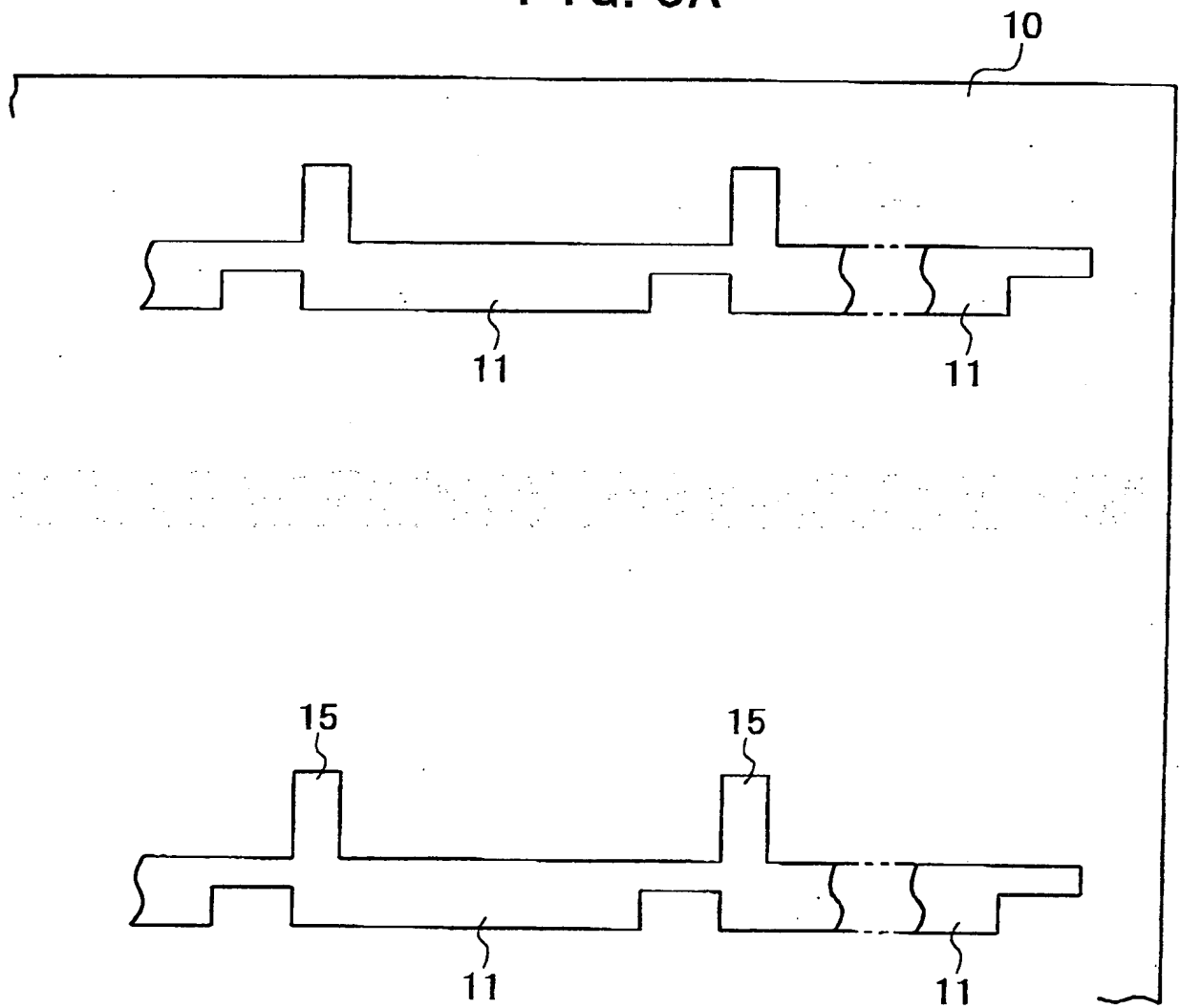


FIG. 3B

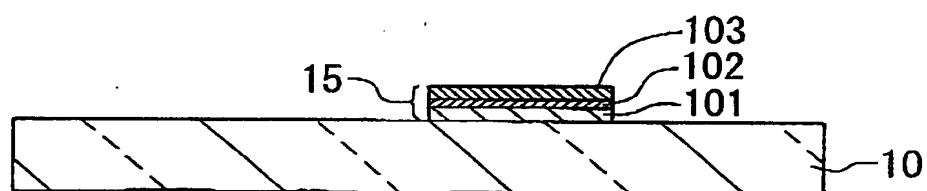


FIG. 3C

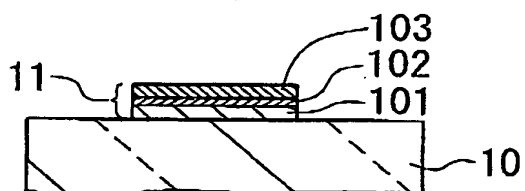


FIG. 3D



FIG. 4A

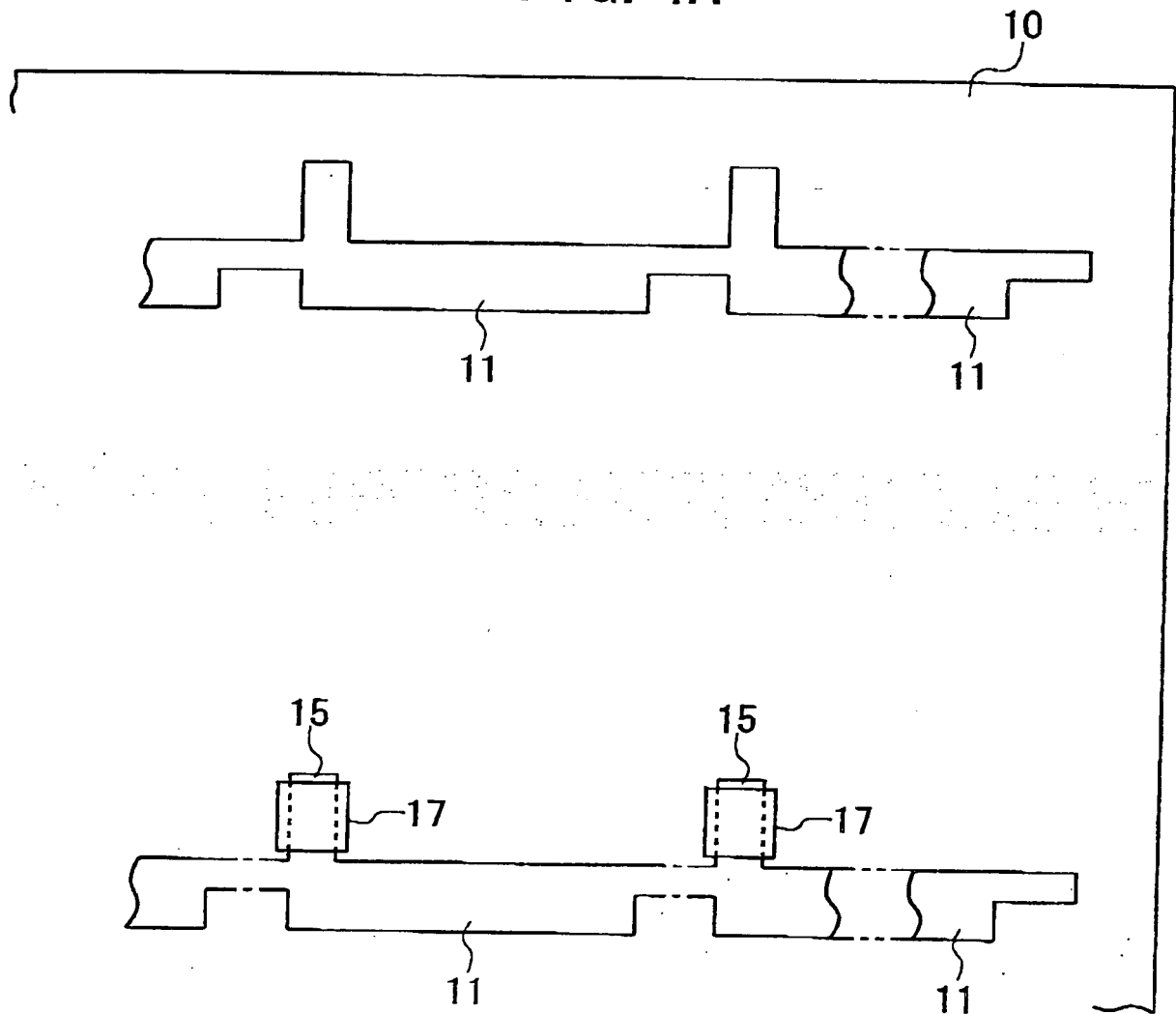


FIG. 4B

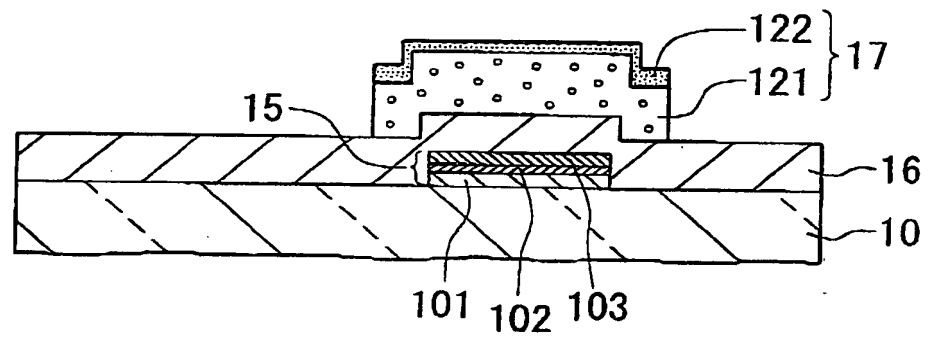


FIG. 4C

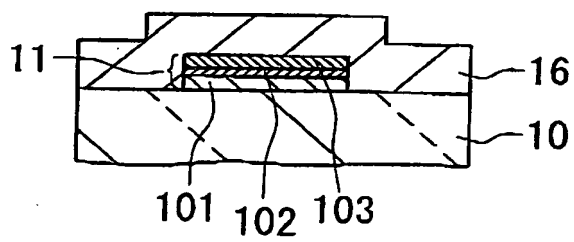


FIG. 4D

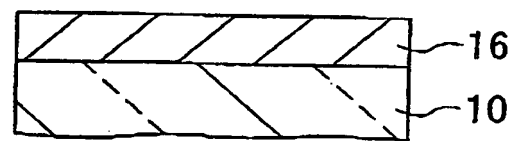


FIG. 5A

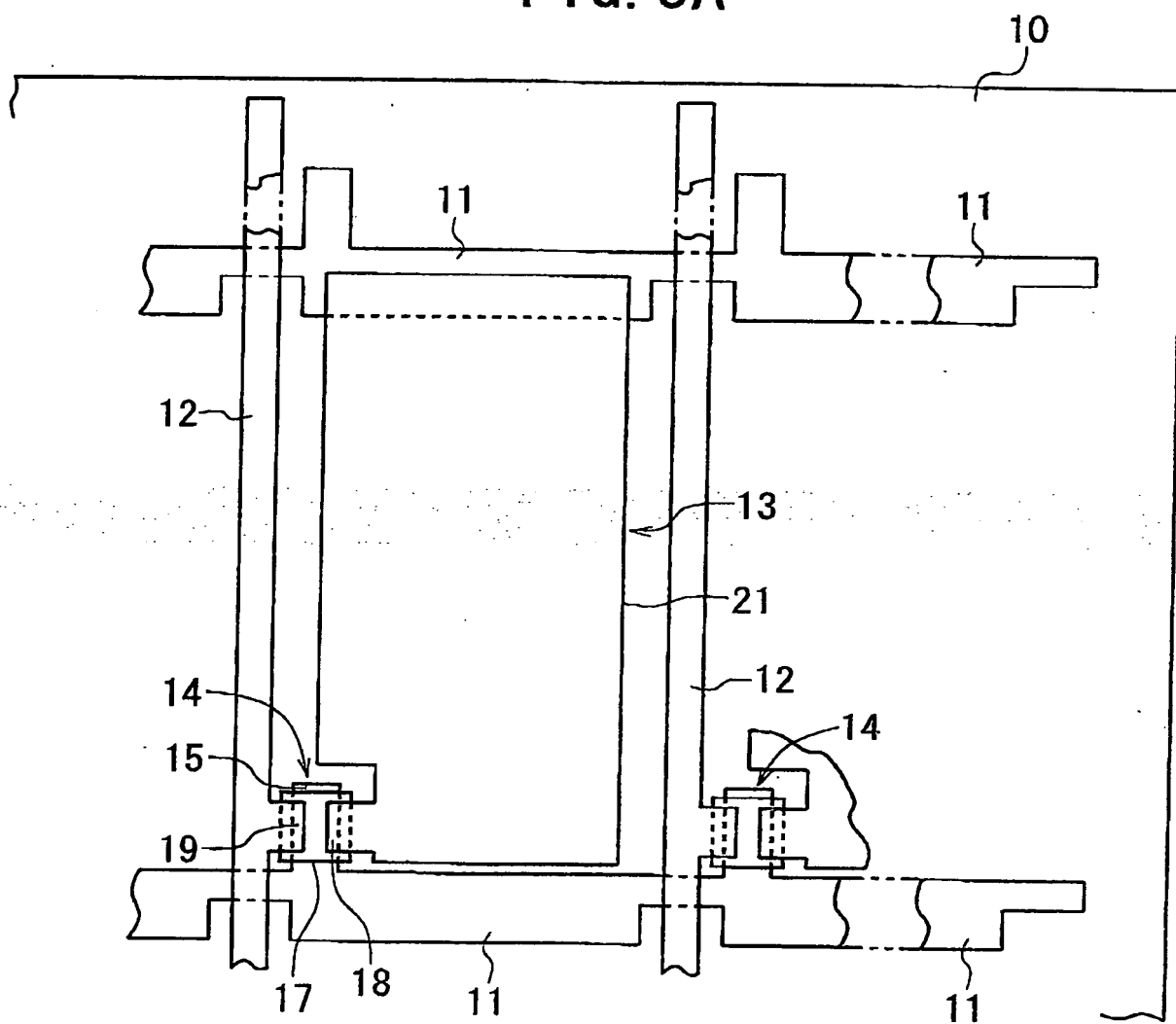


FIG. 5B

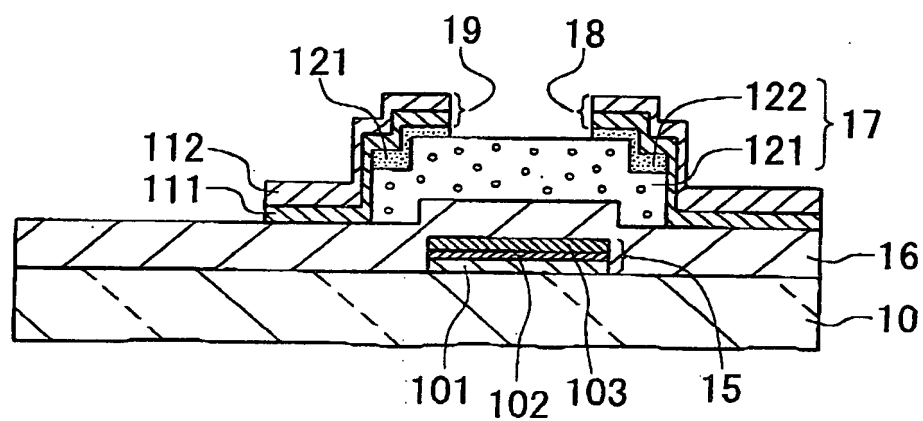


FIG. 5C

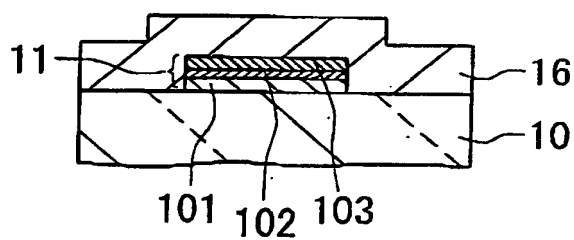


FIG. 5C

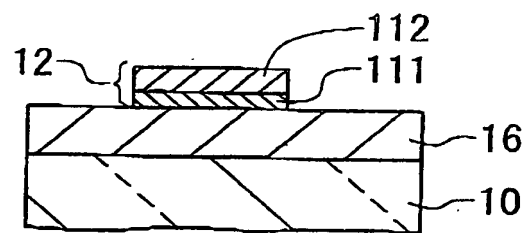


FIG. 6A

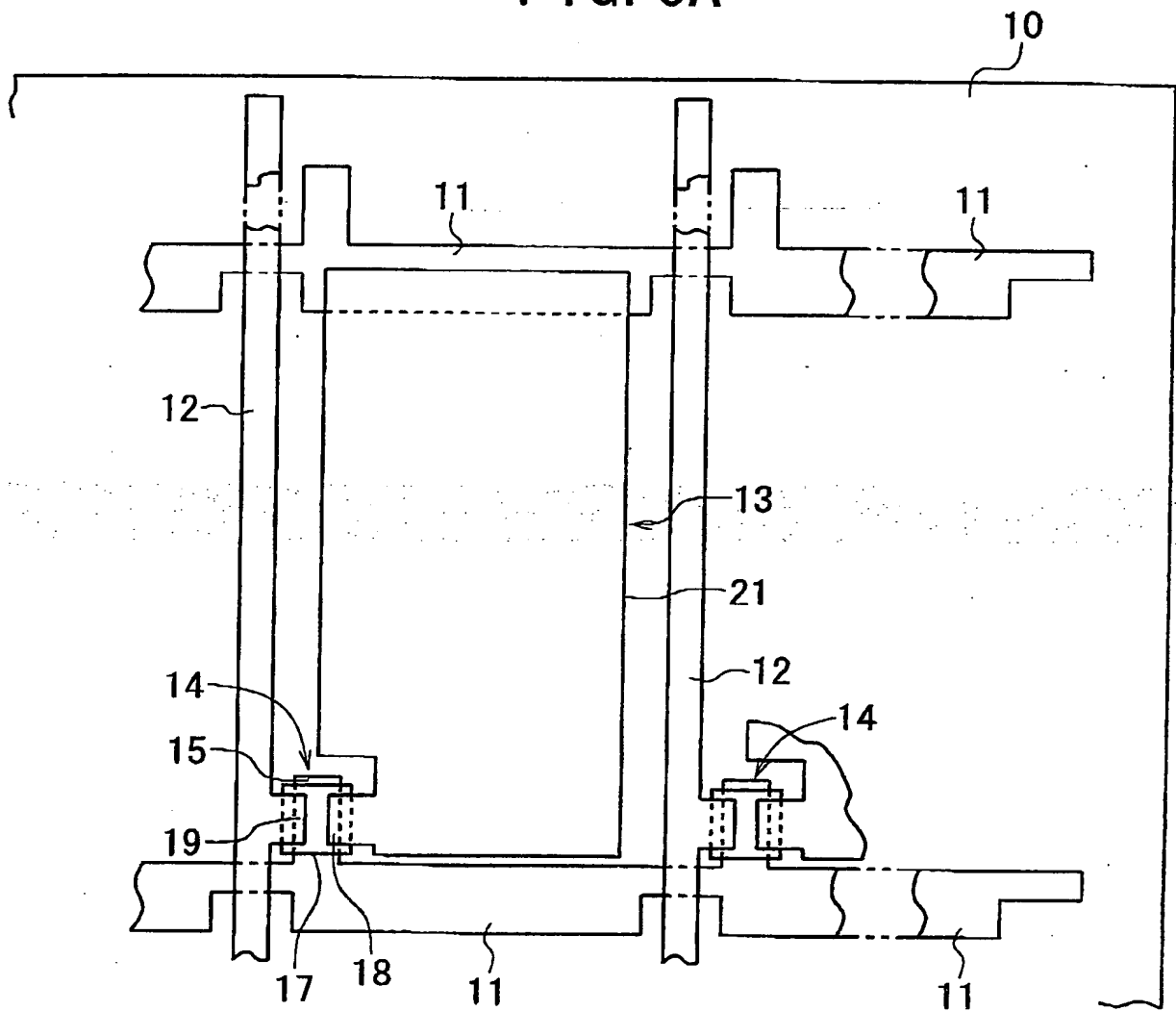


FIG. 6B

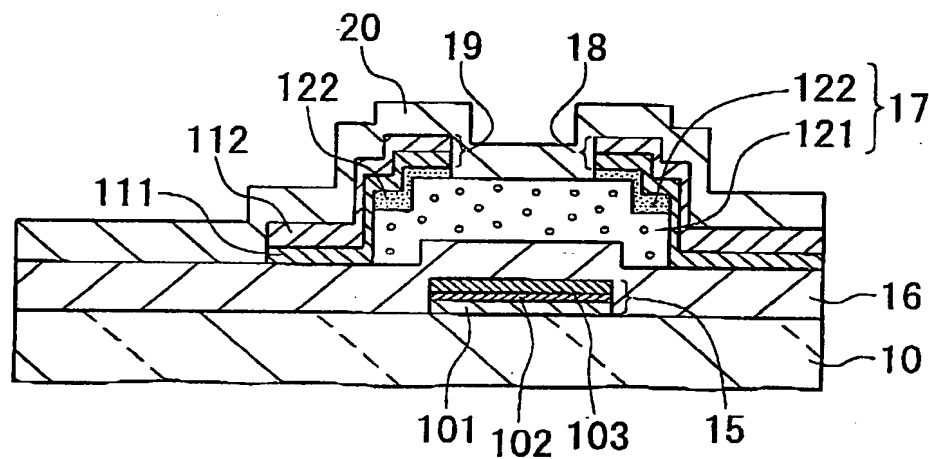


FIG. 6C

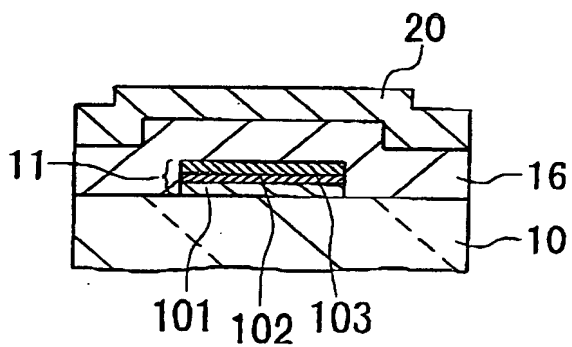


FIG. 6D

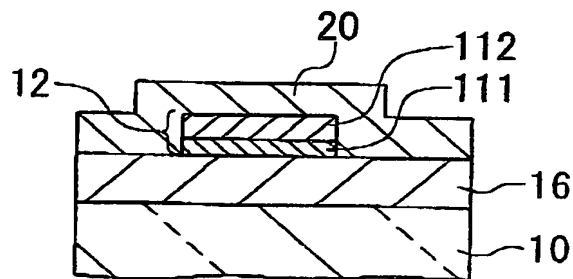


FIG. 7


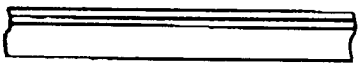
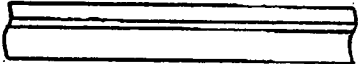
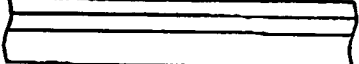
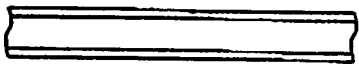
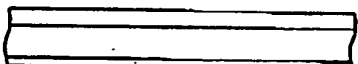
No.	MULTILEVEL STRUCTURE (THICKNESS UNIT: nm)	HEAT TREATMENT	Al HILLOCK NUMBER (pieces/mm ²)
1	TiN (100) / Al (200) 		6410
2	TiN (50) / Ti (50) / Al (200) 		26
3	TiN (100) / Ti (50) / Al (200) 	N ₂ ATMOSPHERE 300°C, 1Hr	~4
4	TiN (100) / Ti (100) / Al (200) 		~1
5	TiN (50) / Al (200) / Ti (30) 		0
6	TiN (100) / Al (200) / Ti (30) 		0

FIG. 8

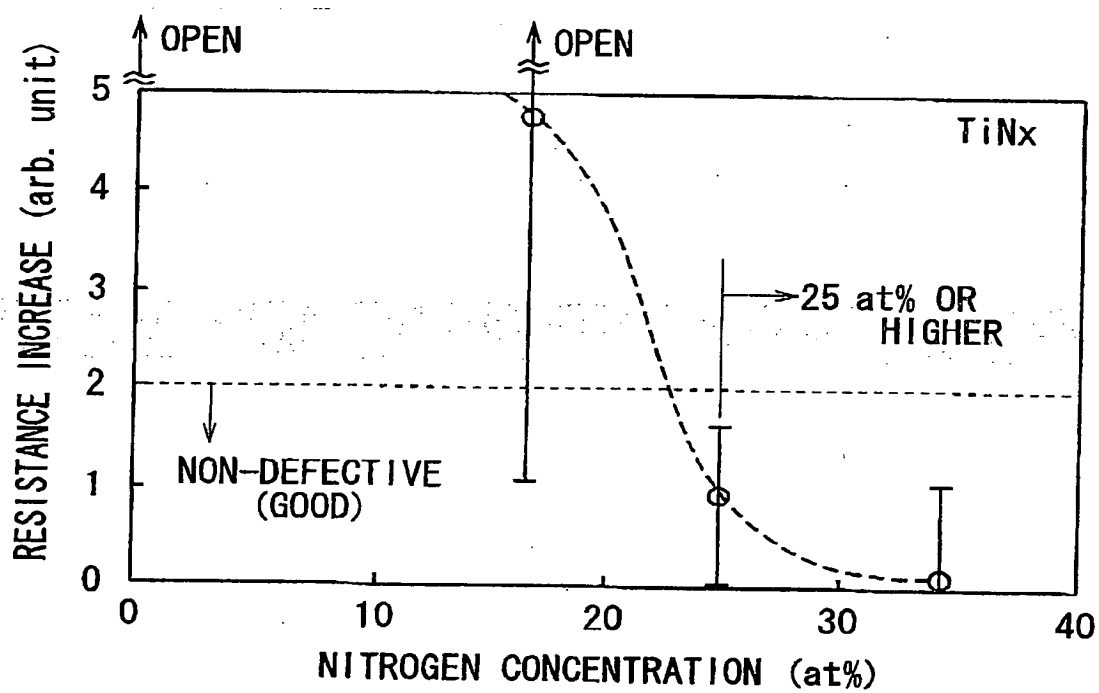


FIG. 9A

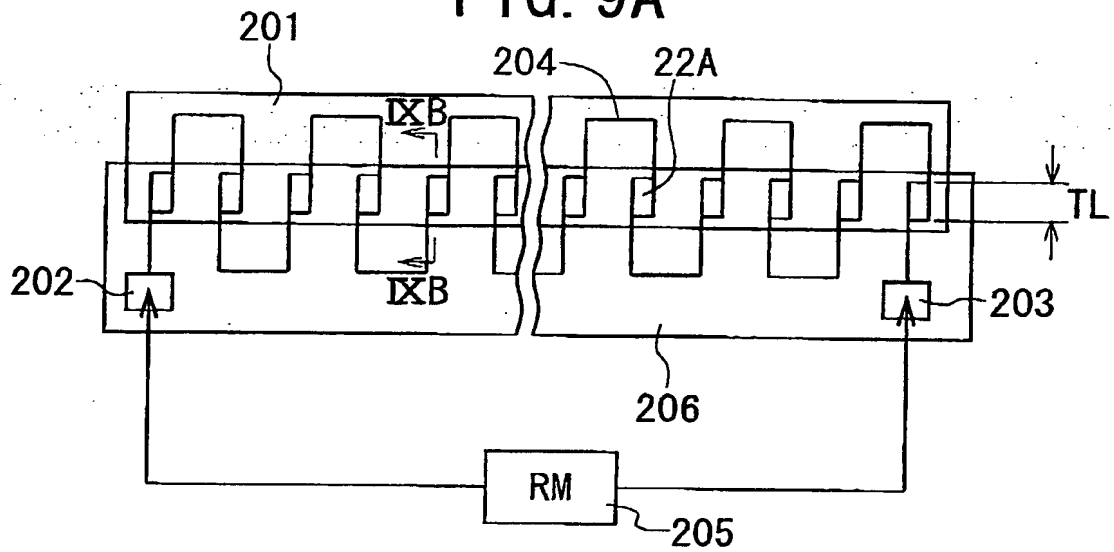


FIG. 9B

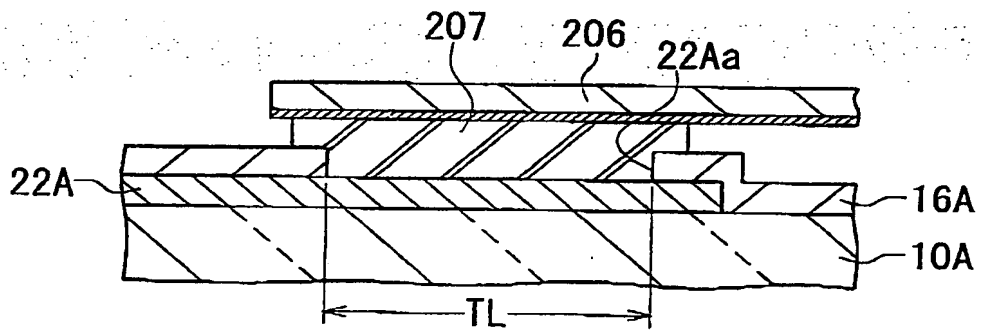


FIG. 9C

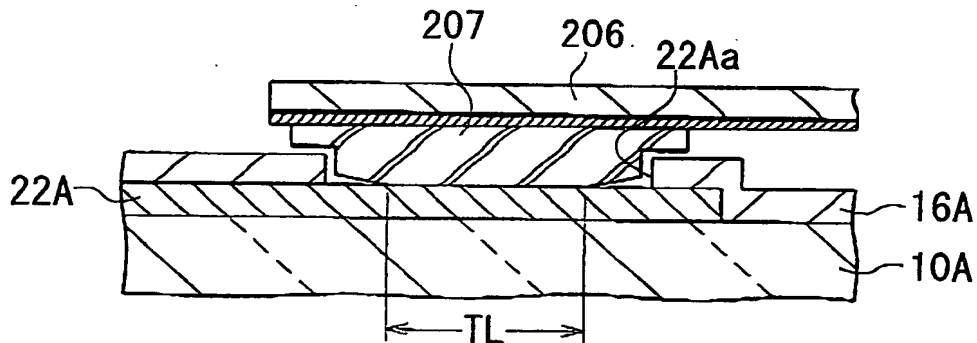
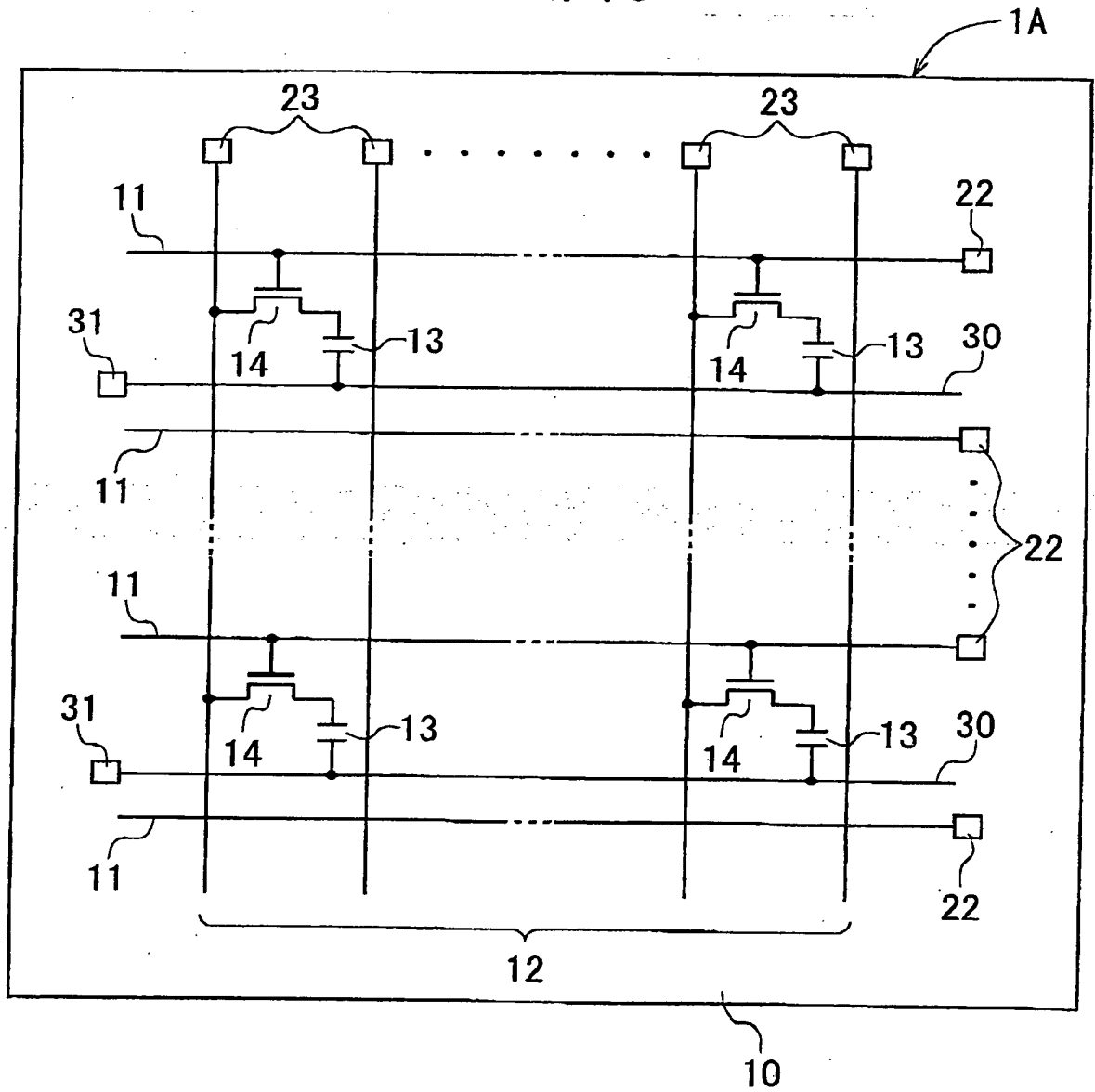


FIG. 10



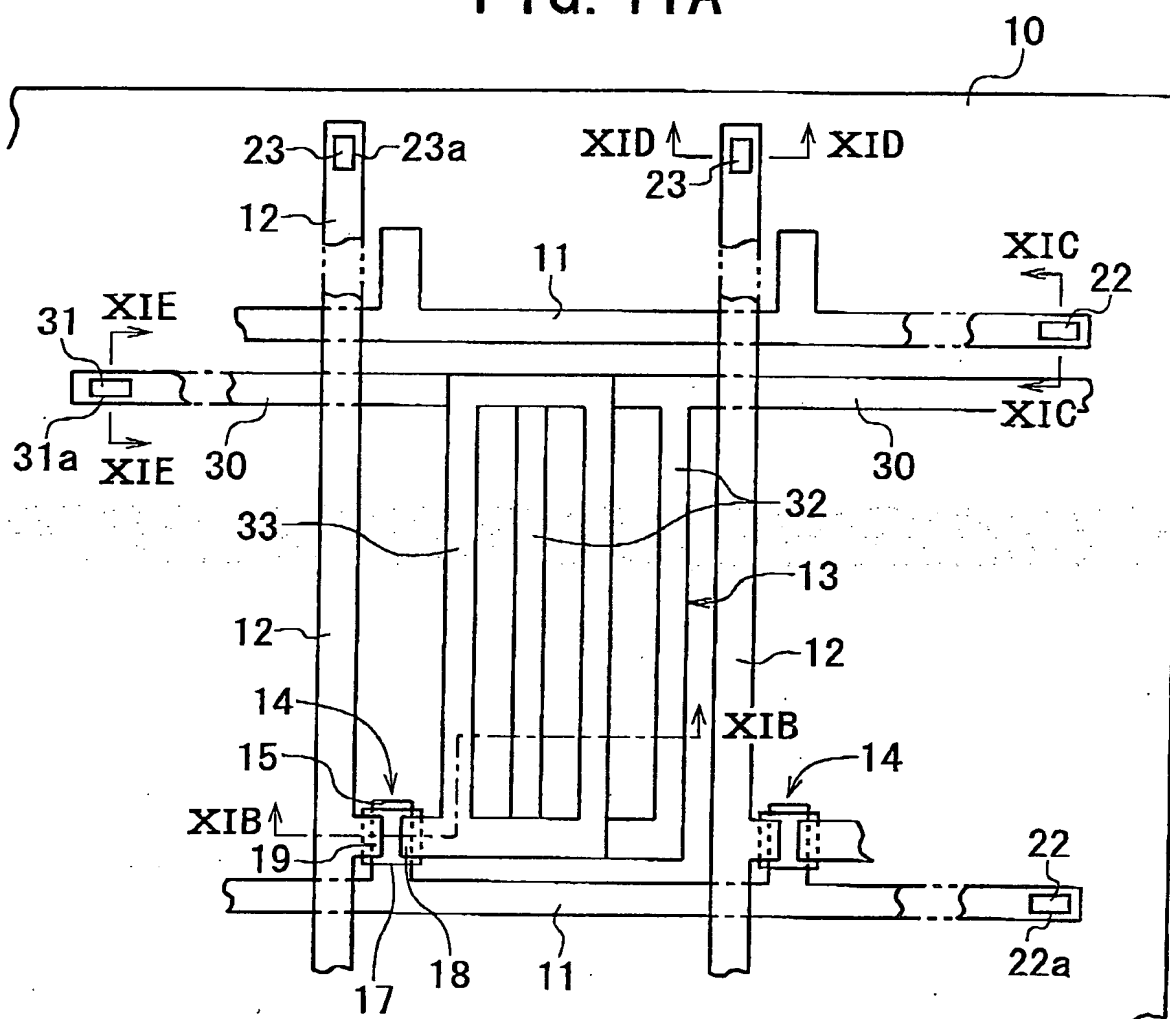
[illegible]

FIG. 11B

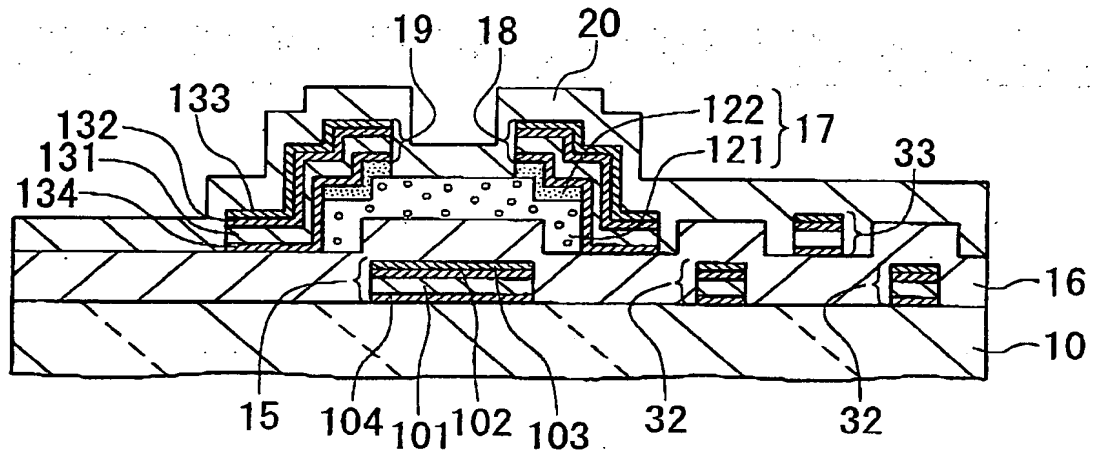


FIG. 11C

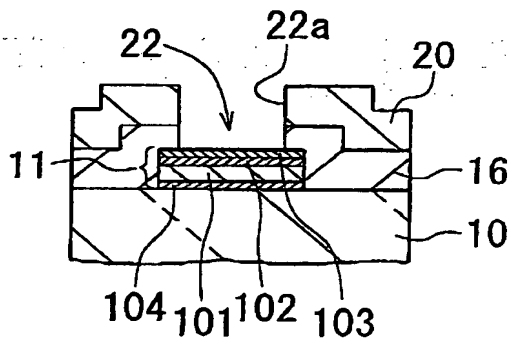


FIG. 11D

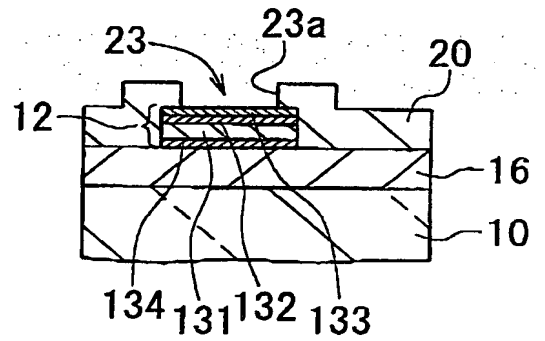


FIG. 11E

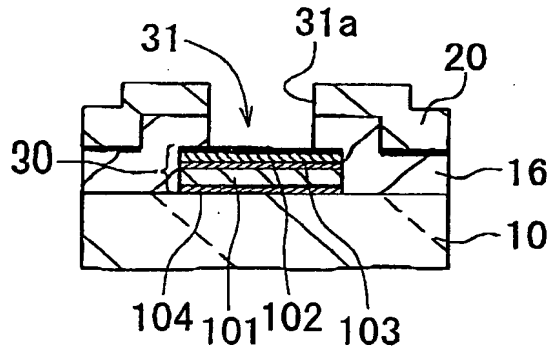


FIG. 12A

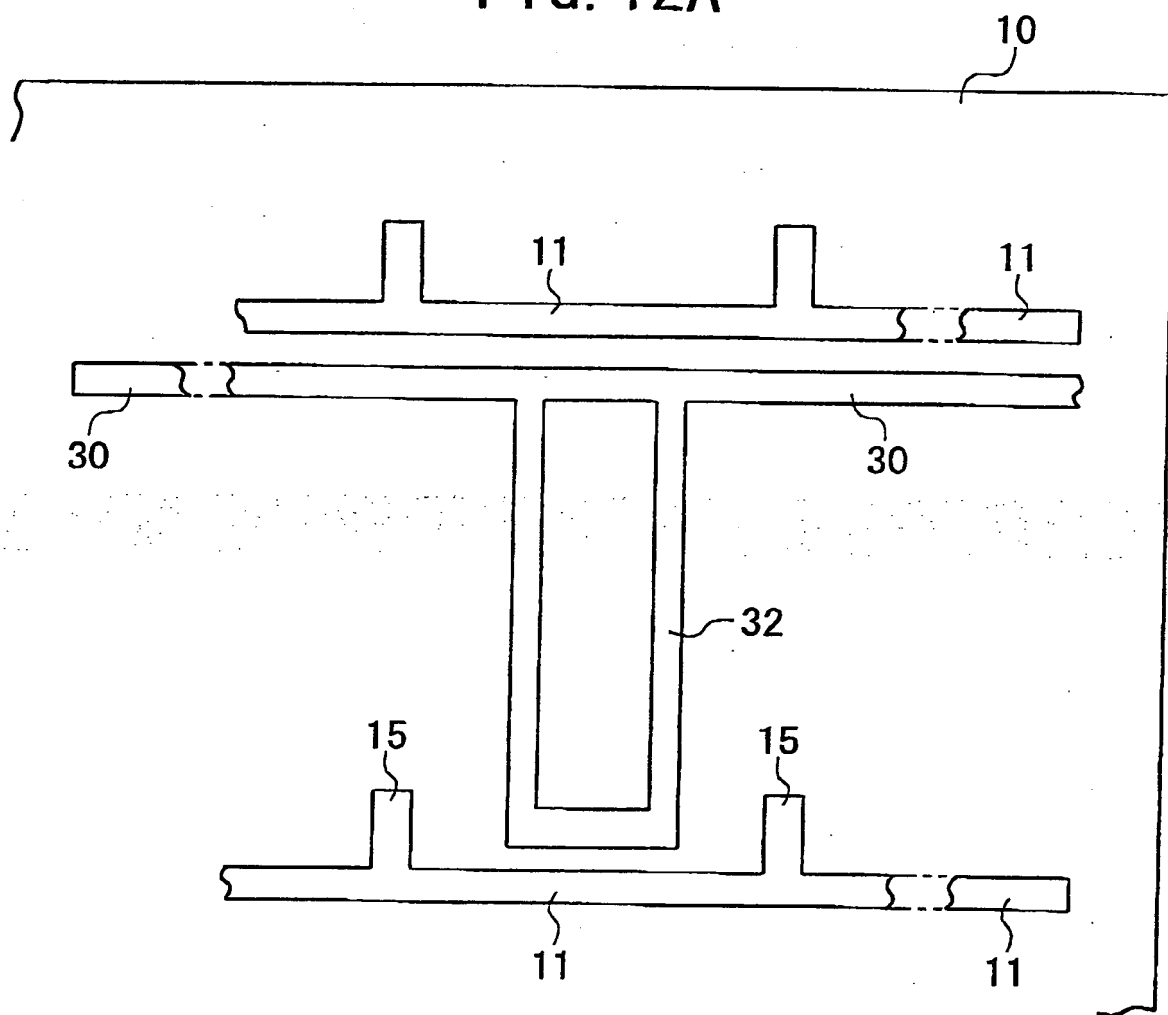


FIG. 12B

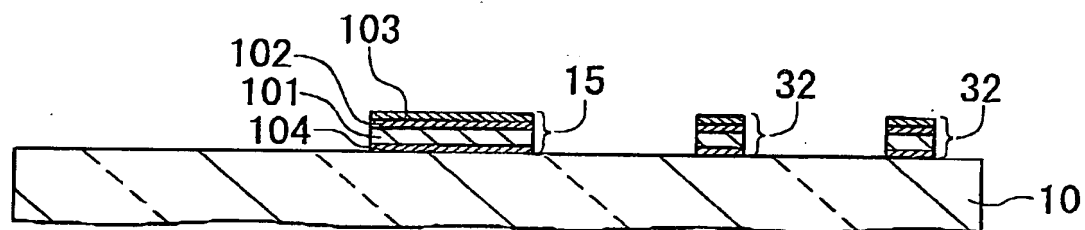


FIG. 12C

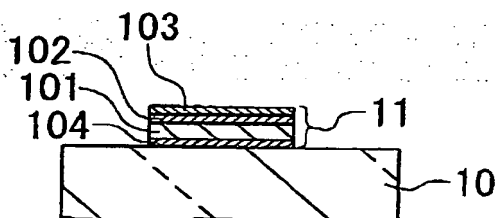


FIG. 12D

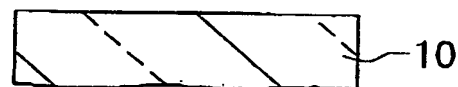


FIG. 12E

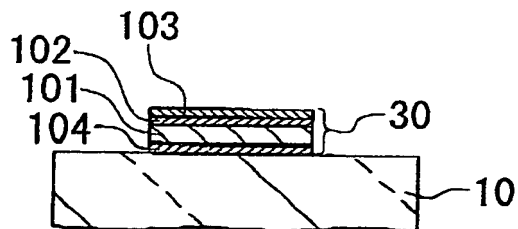


FIG. 13A

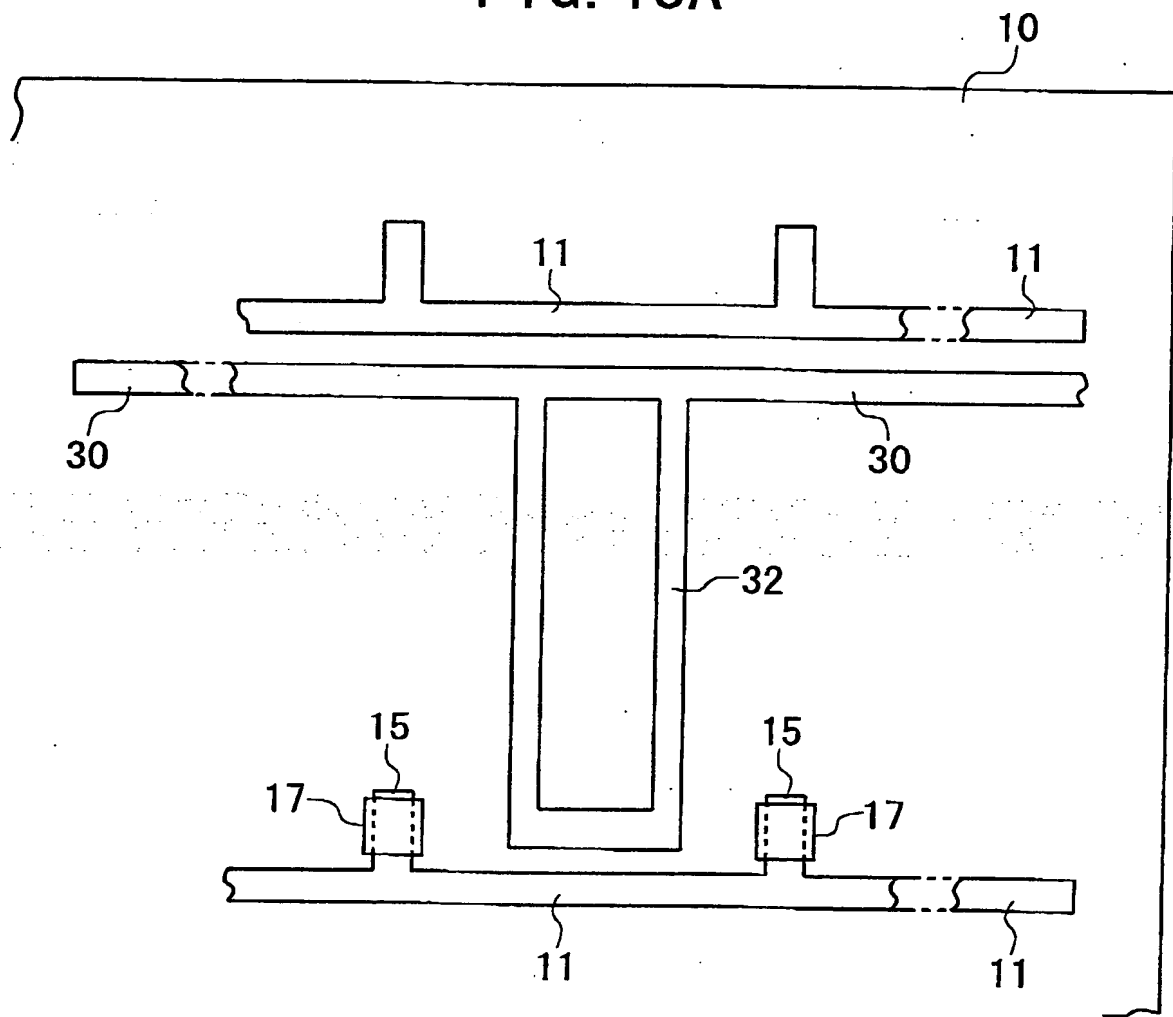


FIG. 13B

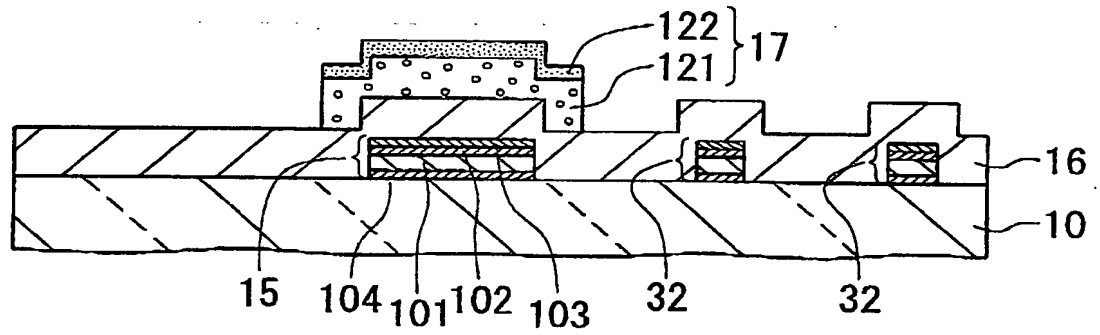


FIG. 13C

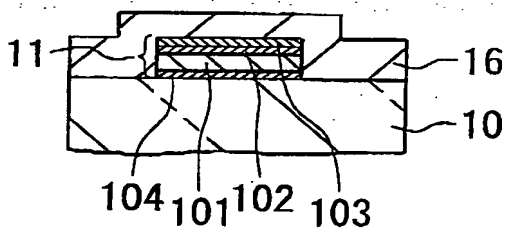
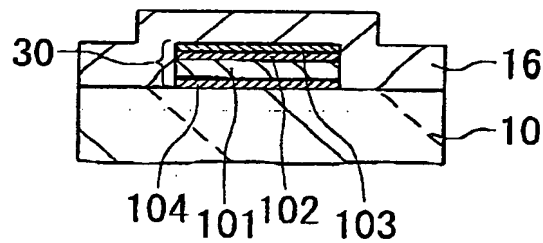


FIG. 13D



FIG. 13E



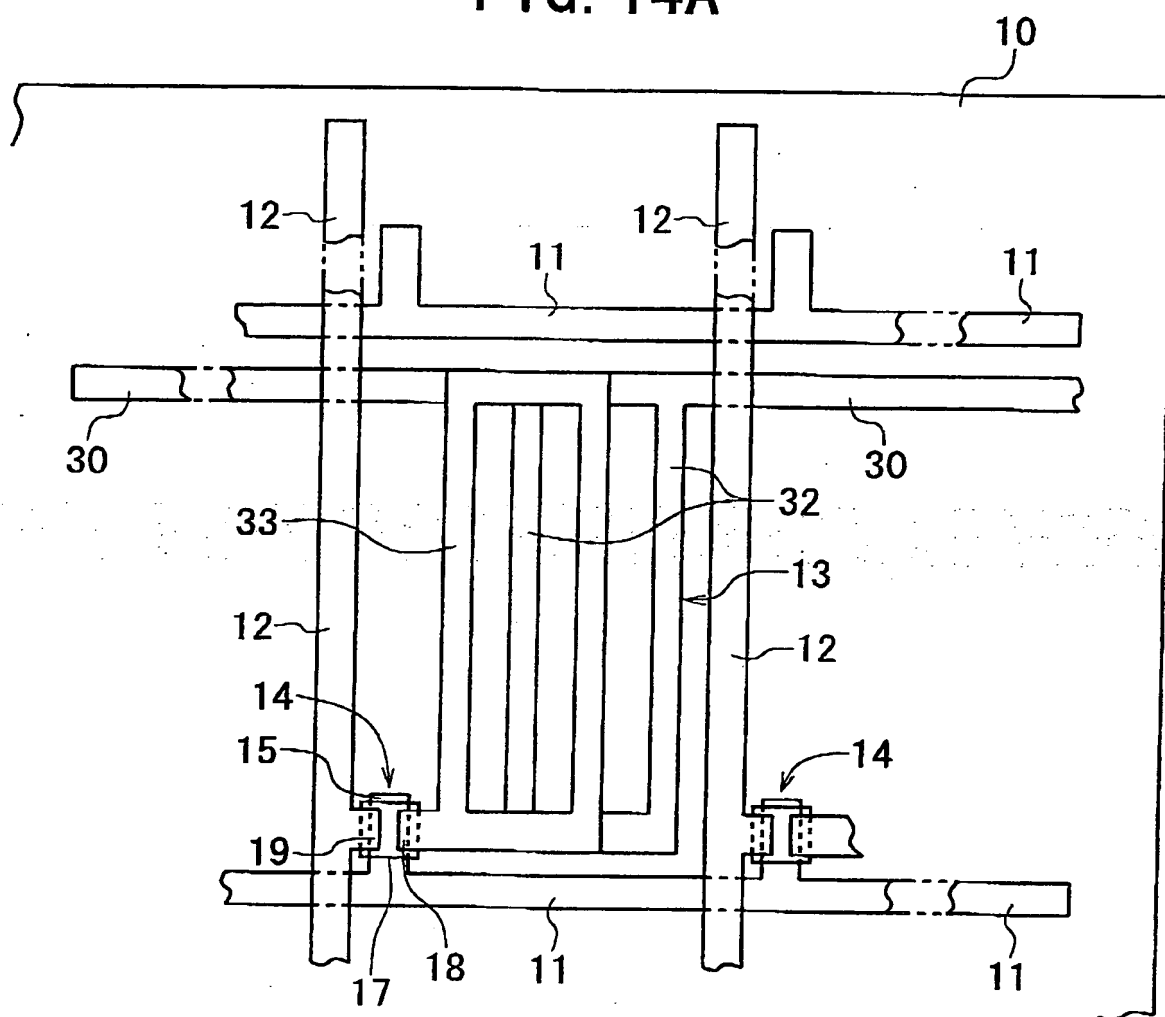
[illegible]

FIG. 14B

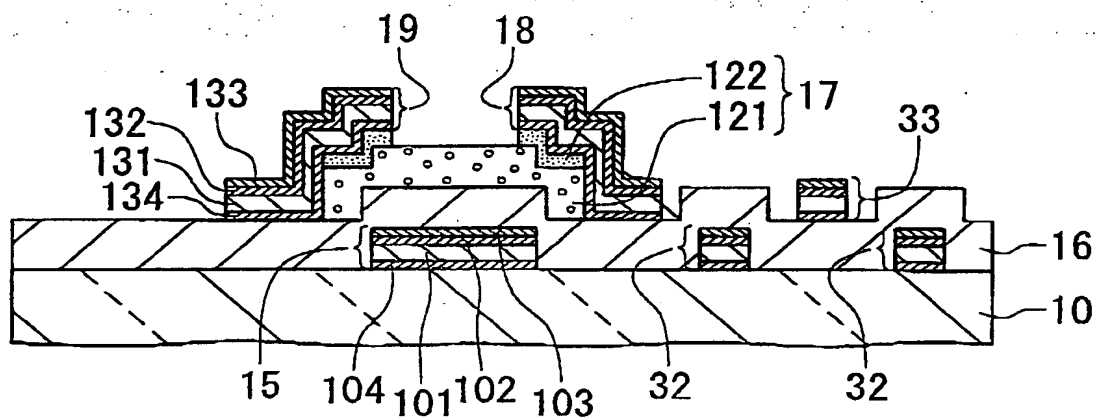


FIG. 14C

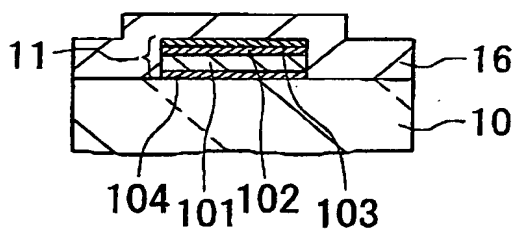


FIG. 14D

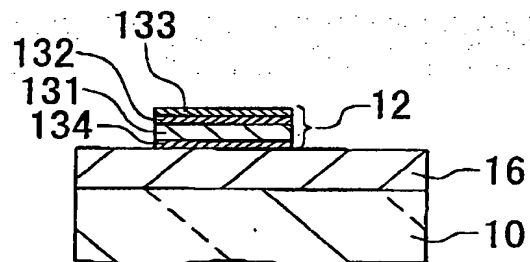


FIG. 14E

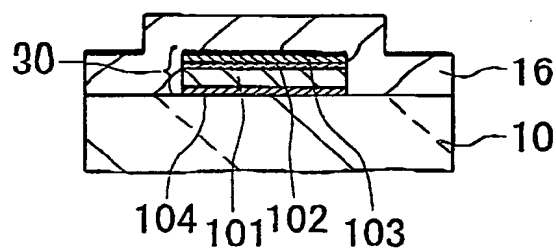


FIG. 15A

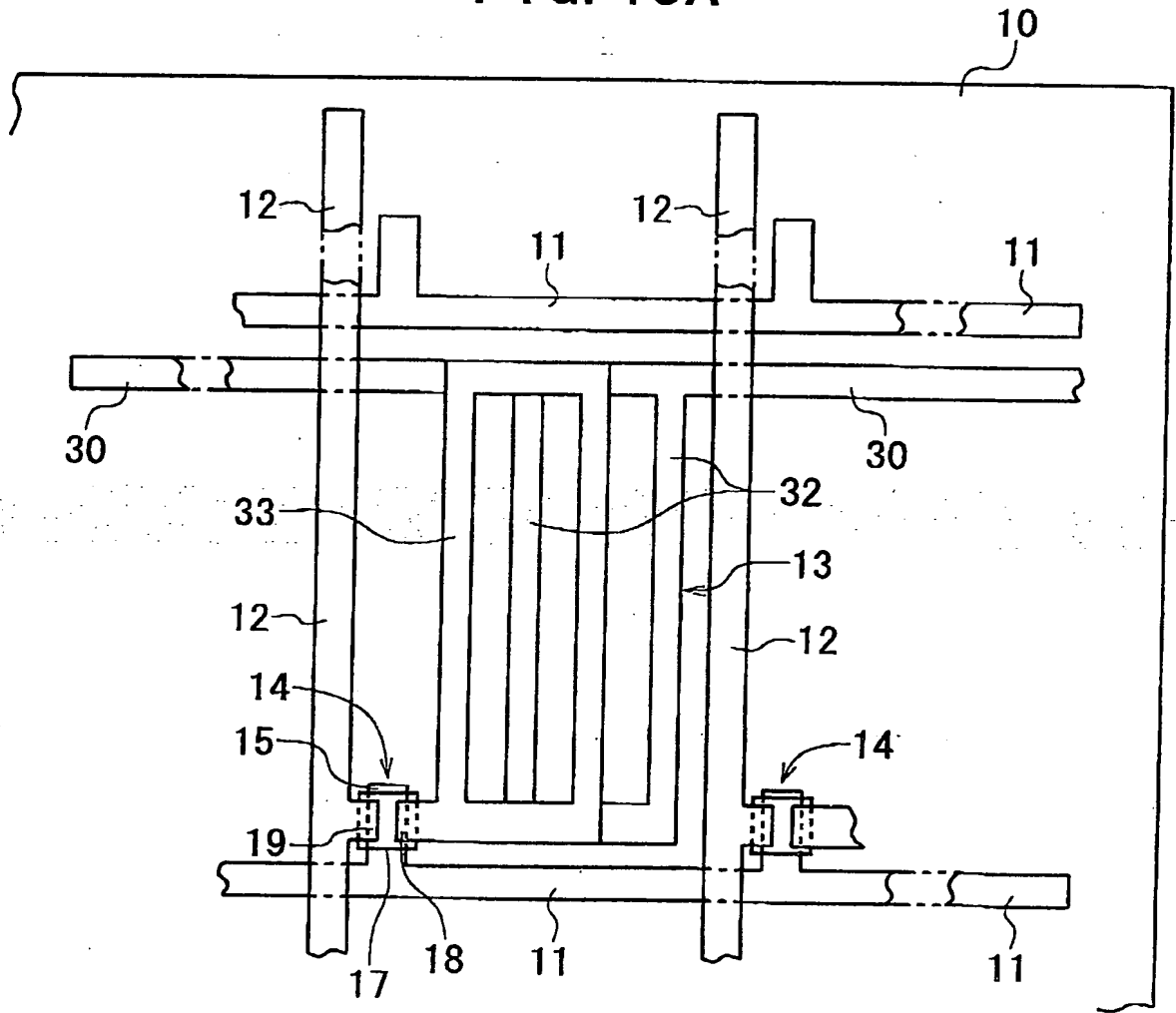


FIG. 15B

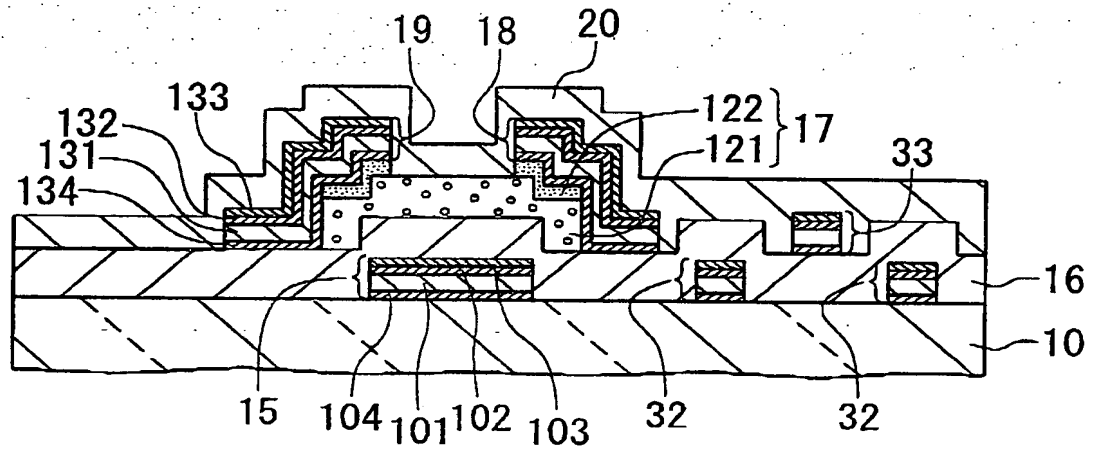


FIG. 15C

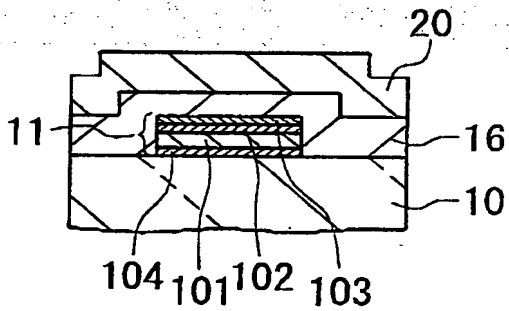


FIG. 15D

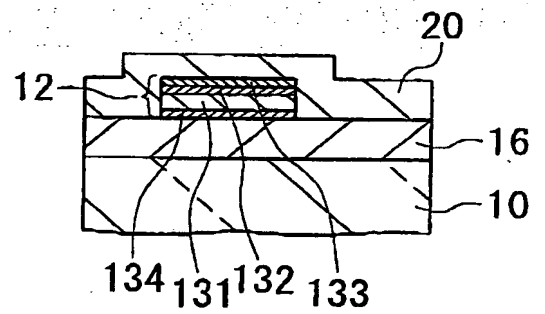


FIG. 15E

